What is claimed is:

1. A broadband amplification apparatus for extending a bandwidth, comprising:

a first and a second amplifying unit for amplifying an input signal;

a buffering unit, which is disposed between the first and the second amplifying unit, for buffering an output signal of the first amplifying unit to thereby maintain a bandwidth of the output signal, increasing a gain and returning back a portion of the buffered signal to the first amplifying unit; and

a first inductive buffer, which is connected to the buffering unit, for enhancing an input impedance as a frequency increases within a predetermined range, thereby introducing little gain changes while serving to extend a bandwidth.

2. The apparatus of claim 1, wherein the first inductive buffer is an inductor.

3. The apparatus of claim 2, wherein the first inductive buffer is an inductor directly formed on a semiconductor chip.

4. The apparatus of claim 3, wherein the first inductive buffer is a strip-line inductor connected to a module outside a semiconductor.

5. The apparatus of claim 4, further comprising a bias unit, which is connected between the buffering unit and the first inductive buffer, for a bias design.

6. The apparatus of claim 5, wherein the bias unit is formed of a transistor.

7. The apparatus of claim 6, wherein the bias unit is formed of a resistor.

8. The apparatus of claim 1, further comprising a second inductive buffer, which is connected to the first amplifying unit, for serving to extend a bandwidth.